

EDITORIAL

Is Atrial Fibrillation Management as Simple as ABC?

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The >30 million people with atrial fibrillation (AF) globally not only have bothersome symptoms, but also face a nearly 5-fold risk of stroke and 2-fold risk of death.¹⁻⁴ Hospitalizations and re-admissions for AF are common, and the implications for population health and healthcare expenditure are well recognized. Like other chronic conditions, AF care requires a multifaceted approach. This care focuses on 3 aspects: (1) stroke prevention; (2) symptom control; and (3) management of other comorbidities and risk factors, such as diabetes mellitus, hypertension, sleep apnea, and obesity. Anyone who routinely cares for patients with AF will recognize that addressing only 1 or 2 of these aspects in isolation is unlikely to lead to lasting meaningful improvements. However, what definitive evidence do we have that such multifaceted approaches are effective? How should we go about implementing such pathways in various settings? Most importantly, do patients perceive these approaches as impactful, minimally disruptive, and valuable?

See Article by Proietti et al.

In this issue of the *Journal of the American Heart Association (JAHA)*, Proietti et al conducted a post hoc analysis of the AFFIRM (Atrial Fibrillation Follow-up Investigation of Rhythm Management) trial focusing on 3 clinically complex groups of AF patients at higher risk of adverse outcomes, specifically those with multiple

comorbidities (2 or more cardiovascular or other systemic conditions in addition to AF), those with polypharmacy (5 or more drugs), and those hospitalized at the time of index AF diagnosis.⁵ Out of 3169 patients in the AFFIRM trial, 54.4%, 38.6%, and 42.9% of patients were classified into the multimorbidity, polypharmacy, and hospitalization groups, respectively. A multifaceted management approach to these complex patients, the so-called “Atrial fibrillation Better Care” (ABC) pathway, was previously described by Dr. Lip.⁶ In ABC, the “A” criterion is fulfilled if the patient has a time in therapeutic range $\geq 70\%$; the “B” criterion is fulfilled if the patient presents with ≤ 2 symptoms; the “C” criterion is fulfilled if the patient is properly managed for the concomitant comorbidities. Not surprisingly, complex patients in AFFIRM who achieved all ABC criteria had 30% to 40% lower risk of the composite outcome of all-cause hospitalization and death after a median follow-up of 3.6 years; unfortunately, this approach was used in <1-in-20 trial participants.

The same authors have previously reported impressive results of the integrated ABC pathway in the AFFIRM population (not focusing only on high-risk patients) with reductions in the risks of death, stroke, major bleeding, and hospitalization with hazard ratios (HRs) ranging between 0.35 and 0.65 for different outcomes.⁷ In that report, 7% of the overall AFFIRM population was receiving care consistent with the ABC scheme. The current report focused on the challenging subset of complicated AF patients and demonstrates consistent associations.

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These early data on favorable associations with outcomes are encouraging. However, perhaps an equally important finding in both the current and the prior report of the ABC pathway in the AFFIRM population is that a small percentage of all patients met ABC criteria. This raises the following questions: If AF management is as simple as the name suggests, then why is optimal care so difficult to achieve? If “ABC” prevalence was so low in a well-conducted clinical trial setting such as AFFIRM, what can one expect from the real world?

The low prevalence of ABC-consistent management may reflect a different era in AF care because the trial was conducted in the late 1990s, possibly before the realization of the importance of an integrated approach to AF care and before the advent of safer and more effective drugs and other interventions (direct oral anticoagulants, mobile monitoring technologies, and catheter ablation techniques). It may also reflect the true challenges of implementing multifaceted care for a complex chronic disease. Furthermore, we note that the ABC criteria are relatively strict. One could argue that, even with high-quality care, some criteria might not be met. For instance, it is well known that a stable INR poorly predicts subsequently time to therapeutic range,^{8,9} so a time to therapeutic range <70% might not necessarily reflect poor quality of care. However, there is clearly an early signal for an association between meeting the ABC criteria and experiencing superior long-term outcomes in AF.

The implementation of the ABC pathway to routine practice was recently evaluated in a trial that randomized >3200 AF patients in China to receive usual care, or integrated care based on a mobile AF application incorporating the ABC.¹⁰ After a mean follow-up of 262 days, the rates of the composite outcome of ischemic stroke/systemic thromboembolism, death, and rehospitalization were lower with the ABC intervention compared with usual care (HR, 0.39; 95% CI, 0.22–0.67). These data suggest that technology might facilitate multifaceted care for complex patients and could potentially help to overcome some of the under-treatment observed in AFFIRM.

From the patients’ perspective, lifelong commitment to multifaceted treatment approaches can be very challenging. For instance, adherence to oral anticoagulants is notoriously low.¹¹ Some patients have misconceptions about anticoagulation (eg, they may believe it is for symptom control or that it can be taken only intermittently; some patients may discontinue anticoagulation because they do not see any noticeable benefits or do not feel better). Other patients have difficulties affording the drugs and may not want to admit this to their physicians. Integrating advice from many clinicians and balancing the complex treatment goals can feel like an insurmountable challenge.

Similarly, from the clinicians’ perspective, the multidisciplinary approach required for adequate AF care is logistically challenging and can result in fragmented care. It is often unclear which clinician in a patient’s care team is responsible for making sure patients are achieving all the goals. Electrophysiologists who focus on ablation and symptom control do not have the opportunity to follow up with patients routinely to manage other comorbidities. Primary care clinicians also have constraints in terms of both time and resources and rely on specialists (eg, endocrinologists, cardiologists, and nephrologists) for managing specific comorbidities. There may at times be a misalignment of expertise and expectations when multiple specialties are involved in the care of patients with AF, and this cannot be overcome unless there is clear communication among the care team, but also direct patient engagement. Integrating the long list of essential interventions that are required for effective AF management requires both clinician and patient engagement. For example, a recent electronic health record-based alert and electronic profiling intervention that aimed to increase anticoagulation use among eligible AF patients appeared feasible, but failed to impact anticoagulation rates, likely because it targeted the clinicians but not the patients.¹²

AF care is challenging, but the stakes are high and the benefits of multifaceted and seamlessly integrated care are great. The current study serves as another reminder that our current approach to AF management may often fall short, and that we must continue to strive towards comprehensive AF care in order to improve health outcomes and reduce costs for the millions with AF globally. The challenge to providing integrated and multifaceted care is not unique to AF or to cardiology, but rather universal for all chronic diseases, and thus, will require multidisciplinary collaboration and system-level reform.

ARTICLE INFORMATION

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Disclosures

None.

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